

Factor.

4. $4x^3 - 8x^2 + 16x$ 5. $30w^2 - 12hw + 6h^2w^2$ 6. $4a^2 - 4ac + 4c^2$
 7. $12a^3 + 6a^2b + 36ab$ 8. $a^2 + 20a + 100$ 9. $x^2 + 4x + 4$
 10. $x^2 + 2x + 1$ 11. $x^2 - 14x + 49$ 12. $x^2 - 18x + 81$
 13. $9x^2 + 48x + 64$ 14. $x^2 - 2xy + y^2$ 15. $25x^2 - 40xy + 16y^2$
 16. $81x^2 + 36xy + 4y^2$
 31. $10axc + 20cay - 30acz$ 32. $12s^6 + 8s^7 - 32s^8 + 36s^9$
 33. $4f^4 - 20e^2f^2 + 25e^4$ 34. $x^6 + 2x^3y^2 + y^4$

Factor.

1. $x^2 + 5x + 6$ 2. $x^2 - 6x + 8$ 3. $t^2 - 12t + 27$
 4. $r^2 - 11r + 18$ 5. $x^2 + 10x + 16$ 6. $y^2 + 15y + 36$
 7. $x^2 - 5x - 14$ 8. $x^2 + x - 20$ 9. $x^2 - 3x - 40$
 10. $c^2 + 2c - 63$ 11. $d^2 + 10d - 75$ 12. $f^2 - 7f - 44$
 13. $3y^2 + 31y + 36$ 14. $2y^2 - 19y + 24$ 15. $5r^2 + 23r + 26$
 16. $2m^2 - 11m + 15$ 17. $5t^2 + 28t + 32$ 18. $2p^2 - 27p + 36$
 19. $3y^2 + 7y - 20$ 20. $5y^2 + 12y - 32$ 21. $7z^2 - 8z - 12$
 22. $2z^2 + z - 28$ 23. $6c^2 + 11c + 4$ 24. $28a^2 + 13a - 6$
 25. $4a^2 + ab - 15b^2$ 26. $14x^2 + 11xy + 2y^2$ 27. $3x^2 - 8xy - 16y^2$
 28. $x^2 - 9x - 13$ 29. $x^4 - 8x^2 + 15$ 30. $2x^4 + x^2 - 6$
 31. $12y^2 - 16y - 35$ 32. $12x^2 - 11x - 56$ 33. $15c^2 - 34c - 16$
 34. $21x^2 + 88x + 60$ 35. $24m^2 + 31mp - 15p^2$ 36. $36r^2 + 91rs - 22s^2$
 37. $21x^2y^2 - 59xy + 40$ 38. $49m^2n^2 + 7mn - 72$ 39. $12x^4 + x^2y^2 - 20y^4$
 40. $4x^4 + 5x^2y^2 - 6y^4$ 41. $4x^2 + 8x + 9$ 42. $5x^2 - 3x + 17$
 43. $x^8 - 2x^4y^4 - 15y^8$ 44. $6x^6 - x^3y^3 - 35y^6$
 45. $12x^4 - 11x^2y - y^2$ 46. $15x^4 + 29x^2y - 2y^2$
 47. $12x^2y^2 + 5xyz - 3z^2$ 48. $6a^2b^2 + 11abc + 4c^2$
 49. $4a^2b^2c^2 - 25abc + 6$ 50. $6x^2y^2z^2 - xyz - 5$